10/629,975
updated Search
LVCook 6/7/05

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(FILE 'HOME' ENTERED AT 12:08:06 ON 07 JUN 2005)

FILE 'BIOSIS, CAPLUS, EMBASE, MEDLINE, CANCERLIT, JAPIO' ENTERED AT 12:08:27 ON 07 JUN 2005

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L1             1 S LACTOFERRIN? AND 450NM
L2           297 S LACTOFERRIN AND POLYCLONAL?
L3            36 S L2 AND ENDOGENOUS?
L4             1 S L3 AND FECAL?
L5            13 S L3 AND ENZYME?
L6            13 DUPLICATE REMOVE L5 (0 DUPLICATES REMOVED)
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d his

     (FILE 'HOME' ENTERED AT 12:08:06 ON 07 JUN 2005)

     FILE 'BIOSIS, CAPLUS, EMBASE, MEDLINE, CANCERLIT, JAPIO' ENTERED AT
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L6            13 DUPLICATE REMOVE L5 (0 DUPLICATES REMOVED)

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ANSWER 6 OF 13 EMBASE COPYRIGHT 2005 ELSEVIER INC. ALL RIGHTS RESERVED.
on STN
AN 96252064 EMBASE
DN 1996252064
TI Anti-**lactoferrin** autoantibodies: Relation between epitopes and iron-binding domain.
AU Audrain M.A.P.; Gourbil A.; Muller J.-Y.; Esnault V.L.M.
CS Laboratoire d'Immunologie, CHU, 9 quai Moncousu,44035 Nantes Cedex, France
SO Journal of Autoimmunity, (1996) Vol. 9, No. 4, pp. 569-574.
ISSN: 0896-8411 CODEN: JOAUEP
CY United Kingdom
DT Journal; Article
FS 005 General Pathology and Pathological Anatomy
018 Cardiovascular Diseases and Cardiovascular Surgery
026 Immunology, Serology and Transplantation
LA English
SL English
ED Entered STN: 960924
Last Updated on STN: 960924
AB Anti-neutrophil cytoplasm antibodies (ANCA) have been found in the sera of patients presenting systemic necrotizing microscopic vasculitis, i.e. Wegener's granulomatosis and microscopic polyangiitis. **Lactoferrin** (LF) is one of the antigens rarely recognized by ANCA, and anti-LF autoantibodies are found in several autoimmune conditions, including rheumatoid vasculitis, rheumatoid arthritis, systemic lupus erythematosus, ulcerative colitis, primary sclerosing cholangitis and Crohn's disease. We analysed the epitopes recognized by human anti-LF antibodies to test whether the heterogeneity of clinical presentation might be due to a different epitope recognition profile. Several monoclonal antibodies were raised and used in competition studies with six human sera. Four distinct epitopes were identified on LF, and LF binding of only one of six sera was inhibited by one of the monoclonals. Thus, anti-LF autoreactivity appears to be **polyclonal** and not restricted to an immunodominant epitope. Specific epitope profiles cannot be determined in these autoimmune conditions. We hypothesized that the interaction of anti-LF antibodies with the LF iron binding domain might contribute to pathogenesis by inhibiting iron chelation after neutrophil activation, thereby providing increased iron availability for endothelial cell damage. The relation of anti-LF mouse monoclonals or **polyclonal** human or rabbit antibodies to the LF iron-binding domain was studied in competition assays between 59Fe and these antibodies. Preincubation of LF with monoclonals or anti-LF human sera did not affect the binding of 59Fe on LF. 59Fe-binding kinetic studies showed that rabbit anti-LF **polyclonal**, but not mouse monoclonals or human anti-LF positive sera, was capable of inhibiting iron binding on LF. Therefore, anti-LF autoantibodies did not appear to modulate LF iron-binding activity. We conclude that LF is a rare antigen specificity for ANCA and that the clinical and pathophysiological relevance of anti-LF autoreactivity remains uncertain.
CT Medical Descriptors:
*autoimmunity
*iron binding capacity
*systemic vasculitis: DI, diagnosis
*systemic vasculitis: ET, etiology
article
controlled study
enzyme linked immunosorbent assay
human
kinetics
major clinical study
priority journal
diagnosis
etiology

Drug Descriptors:
***autoantibody: EC, endogenous compound**
*epitope
***granulocyte antibody: EC, endogenous compound**
***lactoferrin: EC, endogenous compound**
monoclonal antibody
RN (**lactoferrin**) 55599-62-7

ANSWER 3 OF 13 EMBASE
on STN

AN 1999070895 EMBASE

TI Measurement of urinary **lactoferrin** as a marker of urinary tract infection.

AU Arao S.; Matsuura S.; Nonomura M.; Miki K.; Kabasawa K.; Nakanishi H.

CS S. Matsuura, Research and Development Department, Iatron Laboratories, Inc., 1460-6, Mitodai Mito, Tako, Katori, Chiba 289-2247, Japan

SO Journal of Clinical Microbiology, (1999) Vol. 37, No. 3, pp. 553-557.
Refs: 27
ISSN: 0095-1137 CODEN: JCMIDW

CY United States

DT Journal; Article

FS 004 Microbiology
028 Urology and Nephrology

LA English

SL English

ED Entered STN: 19990311
Last Updated on STN: 19990311

AB The usefulness of the measurement of urinary **lactoferrin** (LF) released from polymorphonuclear leukocytes and of an immunochromatography test strip devised for measuring urinary LF for the simple and rapid diagnosis of urinary tract infections (UTI) was evaluated. Urine specimens were collected from apparently healthy persons and patients diagnosed as suffering from UTI. In the preliminary study, the LF concentrations in 121 normal specimens and 88 specimens from patients (60 with UTI) were quantified by an **enzyme**-linked immunosorbent assay. The LF concentration was 3,300.0 ± 646.3 ng/ml (average ± standard error of the mean) in the specimens from UTI patients, whereas it was 30.4 ± 2.7 ng/ml and 60.3 ± 14.9 ng/ml in the specimens from healthy persons and the patients without UTI, respectively. Based on these results, a 200-ng/ml LF concentration was chosen as the cutoff value for negativity. Each urine specimen was reexamined with the newly devised immunochromatography (IC) test strip to calculate the indices of efficacy. Based on the cutoff value, it was calculated that the sensitivity, specificity, and positive and negative predictive values of the IC test were 93.3, 89.3, 86.2, and 94.9%, respectively, compared with the results of the microscopic examination of the urine specimens for the presence of leukocytes. The respective indices for UTI were calculated as 95.0, 92.9, 89.7, and 96.6%. The tests were completed within 10 min. These results indicated that urine LF measurement with the IC test strip provides a useful tool for the simple and rapid diagnosis of UTI.

CT Medical Descriptors:
*urinalysis
*disease marker
*urinary tract infection: DI, diagnosis
measurement
chromatography
enzyme linked immunosorbent assay
diagnostic accuracy
microscopy
intermethod comparison
neutrophil
human
male
female
major clinical study
controlled study
human cell
adolescent
aged
child
adult

article
priority journal
Drug Descriptors:
***lactoferrin: EC, endogenous compound**
polyclonal antibody
monoclonal antibody
RN (**lactoferrin**) 55599-62-7

ANSWER 3 OF 13 EMBASE
on STN

AN 1999070895 EMBASE

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SO Journal of Clinical Microbiology, (1999) Vol. 37, No. 3, pp. 553-557.
Refs: 27
ISSN: 0095-1137 CODEN: JCMIDW

CY United States

DT Journal; Article

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LA English

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ED Entered STN: 19990311
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CT Medical Descriptors:
*urinalysis
*disease marker
*urinary tract infection: DI, diagnosis
measurement
chromatography
enzyme linked immunosorbent assay
diagnostic accuracy
microscopy
intermethod comparison
neutrophil
human
male
female
major clinical study
controlled study
human cell
adolescent
aged
child
adult

article
priority journal
Drug Descriptors:
***lactoferrin: EC, endogenous compound**
polyclonal antibody
monoclonal antibody
RN (**lactoferrin**) 55599-62-7

10/629,975
updated search
LYCook 4/7/05

d his

(FILE 'HOME' ENTERED AT 11:41:37 ON 07 JUN 2005)

FILE 'BIOSIS, CAPLUS, EMBASE, MEDLINE, CANCERLIT, JAPIO' ENTERED AT 11:42:04 ON 07 JUN 2005

L1	4	S (FECAL LACTOFERRIN) AND POLYCLONAL?
L2	1	DUPLICATE REMOVE L1 (3 DUPLICATES REMOVED)
L3	0	S (TOTAL LACTOFERRIN) AND POLYCLONAL?
L4	0	S LACTOFERRIN? AND POLYCONAL?
L5	19760	S LACTOFERRIN?
L6	279	S (FECAL LEUKOCYTE?)
L7	47	S L5 AND L6
L8	0	S L7 AND POLYCLONAL?
L9	9	S L7 AND ANTIBOD?
L10	4	DUPLICATE REMOVE L9 (5 DUPLICATES REMOVED)
L11	6	S (ENDOGENOUS LACTOFERRIN)
L12	3	DUPLICATE REMOVE L11 (3 DUPLICATES REMOVED)

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d his

     (FILE 'HOME' ENTERED AT 11:41:37 ON 07 JUN 2005)

     FILE 'BIOSIS, CAPLUS, EMBASE, MEDLINE, CANCERLIT, JAPIO' ENTERED AT
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L3             0 S (TOTAL LACTOFERRIN) AND POLYCLONAL?
L4             0 S LACTOFERRIN? AND POLYCONAL?
L5         19760 S LACTOFERRIN?
L6           279 S (FECAL LEUKOCYTE?)
L7            47 S L5 AND L6
L8             0 S L7 AND POLYCLONAL?
L9             9 S L7 AND ANTIBOD?
L10            4 DUPLICATE REMOVE L9 (5 DUPLICATES REMOVED)
L11            6 S (ENDOGENOUS LACTOFERRIN)
L12            3 DUPLICATE REMOVE L11 (3 DUPLICATES REMOVED)

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ANSWER 4 OF 4 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
DUPLICATE 2
AN 1992:305244 BIOSIS
DN PREV199294018394; BA94:18394
TI MEASUREMENT OF FECAL **LACTOFERRIN** AS A MARKER OF **FECAL LEUKOCYTES**.
AU GUERRANT R L [Reprint author]; ARAUJO V; SOARES E; KOTLOFF K; LIMA A M; COOPER W H; LEE A G
CS DIV GEOGRAPHIC MED, DEP MED, UNIV VIRGINIA SCH MED, CHARLOTTESVILLE, VA 22908, USA
SO Journal of Clinical Microbiology, (1992) Vol. 30, No. 5, pp. 1238-1242. CODEN: JCMIDW. ISSN: 0095-1137.
DT Article
FS BA
LA ENGLISH
ED Entered STN: 27 Jun 1992
Last Updated on STN: 27 Jun 1992
AB While diarrheal illnesses are extremely common in communities and hospitals throughout the world, an etiologic diagnosis may be expensive and cost-ineffective. Although the presence of **fecal leukocytes** are helpful in the diagnosis and specific therapy of inflammatory diarrheas, this requires prompt microscopic examination of fecal specimens (preferably obtained in a cup rather than a swab or diaper) by a trained observer. We developed a simple, sensitive test for the detection of leukocytes in fecal specimens using antilactoferrin **antibody**. Whereas radial immunodiffusion detected 0.02 μg of **lactoferrin** (LF) per μl or ≥ 2,000 leukocytes per μl, latex agglutination (LA) readily detected ≥ 0.001 μg of LF per μl or ≥ 200 leukocytes per μl added to stool specimens. Despite the destruction or loss of morphologic leukocytes on storage for 1 to 7 days at 4° C or placement of specimens on swabs, measurable LF remained stable. Initial studies of stool specimens from six patients with Salmonella or Clostridium difficile enteritis were positive and those from three controls were negative for LF by LA. Of 17 children in Brazil with inflammatory diarrhea (≥ 1 leukocyte per high-power field), 16 (94%) had LF titers of ≥ 1:50 by LA, whereas only 3 of 12 fecal specimens with < 1 leukocyte per high-power field on methylene blue examination and none of 7 normal control specimens had an LF titer of > 1:50 by LA. Of 16 fecal specimens from patients with C. difficile diarrhea (cytotoxin titers, ≥ 1:1,000), 95% (n = 15) had detectable LF by LA (in titers of 1:100 to 1:800). Finally, of 48 fecal specimens from healthy adult U.S. volunteers before and after experimental shigellosis and of 29 fecal specimens from children with documented shigellosis and hospitalized controls in northeastern Brazil, fecal LF titers ranged from 1:200 to ≥ 1:5,000 in 96% (25 of 26) samples from patients with shigellosis (and reported positive for **fecal leukocytes**), while 51 controls consistently had fecal LF titers of ≤ 1:200. We conclude that fecal LF is a useful marker for **fecal leukocytes**, even when they are morphologically lost on swab specimens or when they are destroyed on transport or storage or by cytotoxic fecal specimens.
CC Biochemistry methods - Proteins, peptides and amino acids 10054
Biochemistry methods - Minerals 10059
Biochemistry studies - Proteins, peptides and amino acids 10064
Biochemistry studies - Minerals 10069
Pathology - Diagnostic 12504
Pathology - Inflammation and inflammatory disease 12508
Digestive system - Pathology 14006
Blood - General and methods 15001
Blood - Blood cell studies 15004
Blood - Lymphatic tissue and reticuloendothelial system 15008
Pediatrics - 25000
Immunology - General and methods 34502

Immunology - Bacterial, viral and fungal 34504
Medical and clinical microbiology - General and methods 36001
Medical and clinical microbiology - Bacteriology 36002
Medical and clinical microbiology - Serodiagnosis 36504

IT Major Concepts
Blood and Lymphatics (Transport and Circulation); Gastroenterology (Human Medicine, Medical Sciences); Immune System (Chemical Coordination and Homeostasis); Infection; Pathology; Serology (Allied Medical Sciences)

IT Miscellaneous Descriptors
SALMONELLA CLOSTRIDIUM-DIFFICILE ENTERITIS CHILDREN ADULTS SHIGELLOSIS INFLAMMATORY DIARRHEA ANTILACTOFERRIN **ANTIBODY** LATEX AGGLUTINATION IMMUNOLOGIC METHOD DIAGNOSTIC METHOD

ORGN Classifier
Enterobacteriaceae 06702
Super Taxa
Facultatively Anaerobic Gram-Negative Rods; Eubacteria; Bacteria; Microorganisms
Taxa Notes
Bacteria, Eubacteria, Microorganisms

ORGN Classifier
Endospore-forming Gram-Positives 07810
Super Taxa
Eubacteria; Bacteria; Microorganisms
Taxa Notes
Bacteria, Eubacteria, Microorganisms

ORGN Classifier
Hominidae 86215
Super Taxa
Primates; Mammalia; Vertebrata; Chordata; Animalia
Taxa Notes
Animals, Chordates, Humans, Mammals, Primates, Vertebrates

=>

ANSWER 3 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN
AN 1992:509404 CAPLUS
DN 117:109404
ED Entered STN: 20 Sep 1992
TI In vitro test for **fecal leukocytes** for diagnosis of inflammatory diarrhea
IN Guerrant, Richard L.; Lee, Amelia G.; Cooper, William H.
PA University of Virginia Alumni Patents Foundation, USA
SO U.S., 5 pp.
CODEN: USXXAM
DT Patent
LA English
IC ICM G01N033-559
ICS G01N033-551; G01N033-546
INCL 435007240
CC 14-7 (Mammalian Pathological Biochemistry)
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 5124252	A	19920623	US 1989-442309	19891128
PRAI US 1989-442309		19891128		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 5124252	ICM	G01N033-559
	ICS	G01N033-551; G01N033-546
	INCL	435007240
US 5124252	NCL	435/007.240; 435/007.920; 435/007.940; 436/514.000; 436/534.000

AB Inflammatory is distinguished from noninflammatory diarrhea by testing a fecal sample with an immunoassay for **lactoferrin** to estimate the number of **fecal leukocytes**. Assays used included a radial immunodiffusion assay, a latex agglutination assay, and an ELISA.
ST inflammatory diarrhea diagnosis **lactoferrin** leukocyte
IT **Lactoferrins**
RL: ANT (Analyte); ANST (Analytical study)
(determination of, by immunoassay in leukocyte estimation in feces for inflammatory diarrhea diagnosis)
IT Leukocyte
(estimation of, in feces with **lactoferrin** immunoassay for inflammatory diarrhea diagnosis)
IT Feces
(leukocyte estimation in, with **lactoferrin** immunoassay for inflammatory diarrhea diagnosis)
IT **Antibodies**
RL: BIOL (Biological study)
(to **lactoferrin**, for leukocyte estimation in feces for inflammatory diarrhea diagnosis)
IT Diarrhea
(inflammatory, diagnosis of, leukocyte estimation in feces with **lactoferrin** immunoassay for)

ANSWER 2 OF 4 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN
DUPLICATE 1
AN 1996:22064 BIOSIS
DN PREV199698594199
TI Correlation of **lactoferrin** with neutrophilic inflammation in body fluids.
AU Martins, Clovis A. P.; Fonteles, Maria G.; Barrett, Leah J.; Guerrant, Richard L. [Reprint author]
CS Box 485, Div. Geographic and Int. Med., Univ. Va. Sch. Med., Charlottesville, VA 22908, USA
SO Clinical and Diagnostic Laboratory Immunology, (1995) Vol. 2, No. 6, pp. 763-765.
ISSN: 1071-412X.
DT Article
LA English
ED Entered STN: 12 Jan 1996
Last Updated on STN: 12 Jan 1996
AB We have reported that **lactoferrin**, a 77-kDa iron-binding glycoprotein found in secondary neutrophil granules, provides a useful marker of **fecal leukocytes** in fecal specimens from patients with inflammatory diarrhea (R. L. Guerrant, V. Araujo, E. Soares, K. Kotloff, A. A. M. Lima, W. H. Cooper, and A. G. Lee, J. Clin. Microbiol. 30:1238-1242, 1992). In order to determine the usefulness of this marker of neutrophilic inflammation in different body fluids, we examined blood, gingival swabs, sputum, and saliva using antilactoferrin **antibodies** (**lactoferrin** latex agglutination (LFLA)). LFLA titers in whole blood samples were ltoreq 1:4 in all eight samples from patients with neutropenia (absolute neutrophil count (ANC) = lt 150 polymorphonuclear cells (PMNs) per mu-l), ltoreq 1:8 in samples from 13 individuals with moderate leukocyte counts (ANC = 150 to 8,000), and 1:8 to 1:32 in samples from six patients with neutrophilia (ANC gt 8,000). While the overlap precludes a useful role in the identification of neutropenia, these data confirm that **lactoferrin** titers of gt 1:100 indeed indicate inflammation in fluid specimens. On quantitative elution of **lactoferrin** from gingival swabs, all 7 patients with dental plaque had titers of 1:200 to 1:400; 9 of 12 patients with clinical gingivitis had LFLA titers of 1:200 to 1:1,600, while all 7 individuals with healthy gums and teeth and 4 edentulous patients had LFLA titers of ltoreq 1:100. Eight purulent sputum samples had titers of gtoreq 1:400 (7 were 1:1,600) while 11 normal saliva samples showed titers of ltoreq 1:100. **Lactoferrin** titers in sputum, gingival swabs, and whole blood correlate with the presence of neutrophils or inflammation in these specimens and may offer a convenient rapid test for inflammatory processes.
CC Cytology - Human 02508
Biochemistry methods - Proteins, peptides and amino acids 10054
Biochemistry studies - Proteins, peptides and amino acids 10064
Biophysics - Methods and techniques 10504
Pathology - Diagnostic 12504
Pathology - Inflammation and inflammatory disease 12508
Digestive system - Physiology and biochemistry 14004
Digestive system - Pathology 14006
Blood - Blood cell studies 15004
Blood - Lymphatic tissue and reticuloendothelial system 15008
Immunology - General and methods 34502
Immunology - Immunopathology, tissue immunology 34508
IT Major Concepts
Biochemistry and Molecular Biophysics; Blood and Lymphatics (Transport and Circulation); Cell Biology; Clinical Endocrinology (Human Medicine, Medical Sciences); Digestive System (Ingestion and Assimilation); Gastroenterology (Human Medicine, Medical Sciences); Immune System (Chemical Coordination and Homeostasis); Pathology
IT Miscellaneous Descriptors

DIAGNOSTIC IMPLICATIONS; **FECAL LEUKOCYTE** MARKER;
INFLAMMATORY DIARRHEA; INFLAMMATORY PROCESS; **LACTOFERRIN**
LATEX AGGLUTINATION

ORGN Classifier
Hominidae 86215
Super Taxa
Primates; Mammalia; Vertebrata; Chordata; Animalia
Organism Name
human
Taxa Notes
Animals, Chordates, Humans, Mammals, Primates, Vertebrates